

# HC-49U/N Series Surface Mount Crystals

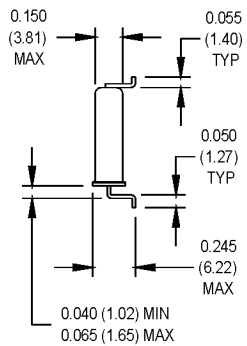
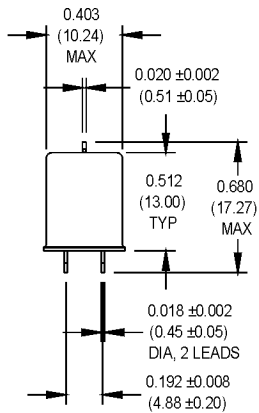


## Electrical/Environmental Specifications

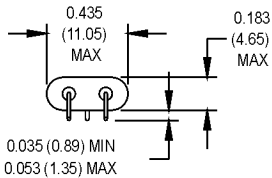
PARAMETERS	VALUE
Frequency Range	1.8432 to 200.000 MHz
Tolerance @ +25°C	±30 ppm
Stability	±50 ppm
Aging	±5 ppm/yr. Max.
Shunt Capacitance	7 pF Max.
Load Capacitance	18 pF Std.
Standard Operating Conditions	-10°C to +70°C
Equivalent Series Resistance (ESR), Max.	
Fundamental (AT-cut)	
1.8432 to 1.999 MHz	700 Ω
2.000 to 2.399 MHz	600 Ω
2.400 to 3.299 MHz	400 Ω
3.300 to 3.569 MHz	140 Ω
3.570 to 3.999 MHz	100 Ω
4.000 to 5.999 MHz	75 Ω
6.000 to 7.999 MHz	50 Ω
8.000 to 10.999 MHz	40 Ω
11.000 to 14.999 MHz	30 Ω
15.000 to 34.000 MHz	25 Ω
Third Overtones (AT-cut)	
20.000 to 49.999 MHz	40 Ω
50.000 to 75.000 MHz	50 Ω
Fifth Overtones (AT-cut)	
50.000 to 125.000 MHz	90 Ω
Seventh Overtones (AT-cut)	
125.000 to 200.000 MHz	150 Ω
Drive Level	1 mW Max.
Holder	HC-49/U
Mechanical Shock	MIL-STD-202, Method 213, C
Vibration	MIL-STD-202, Method 201 & 204
Thermal Cycle	MIL-STD-883, Method 1010, B

\*HC-49U/N 00.0000 MHz (customer specified frequency)

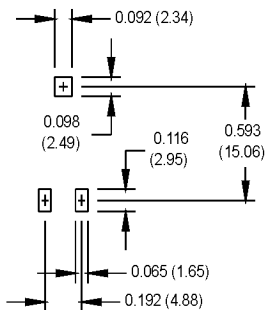
\*HC-49U/N-R 00.0000 MHz (RoHS compliant and customer specified frequency)



All dimensions in inches (mm).

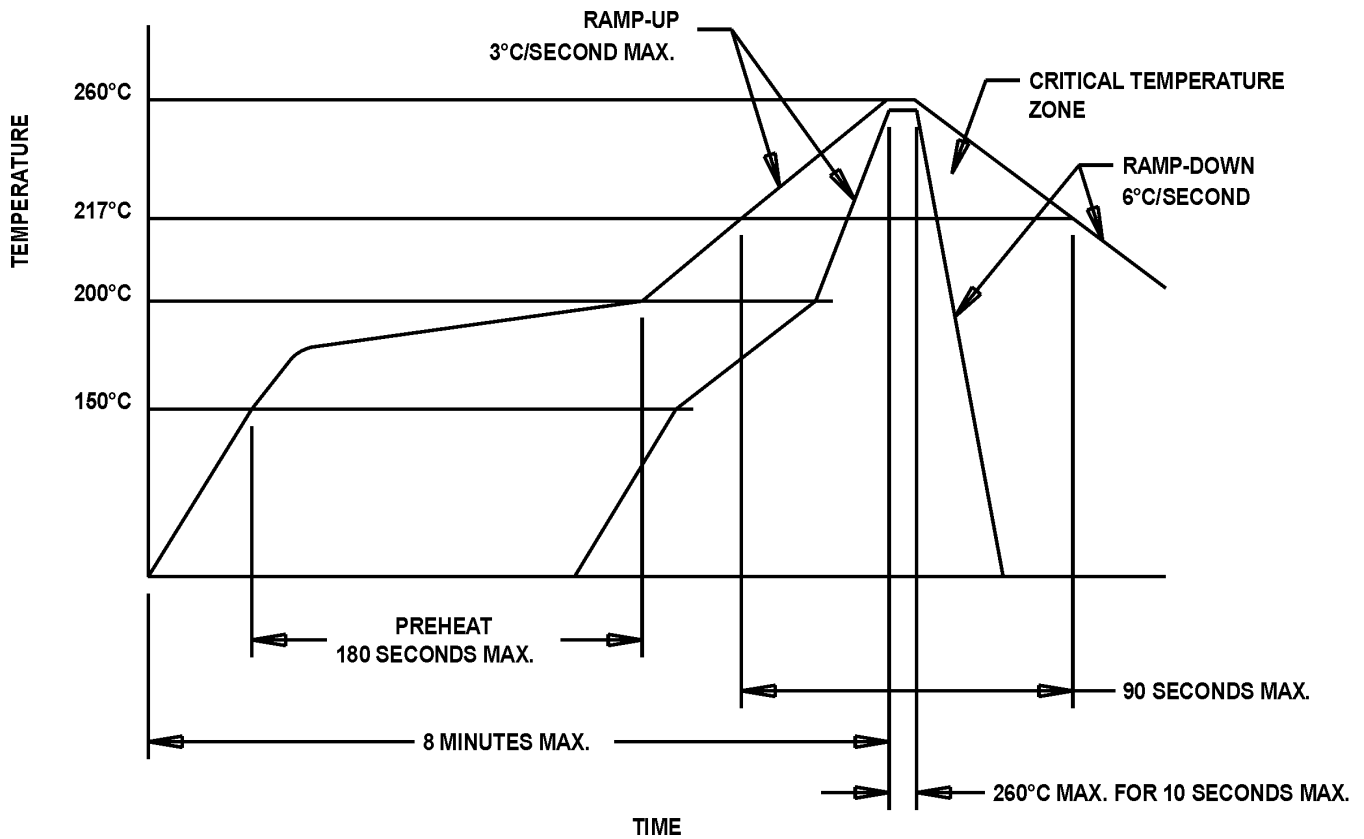


### SUGGESTED SOLDER PAD LAYOUT



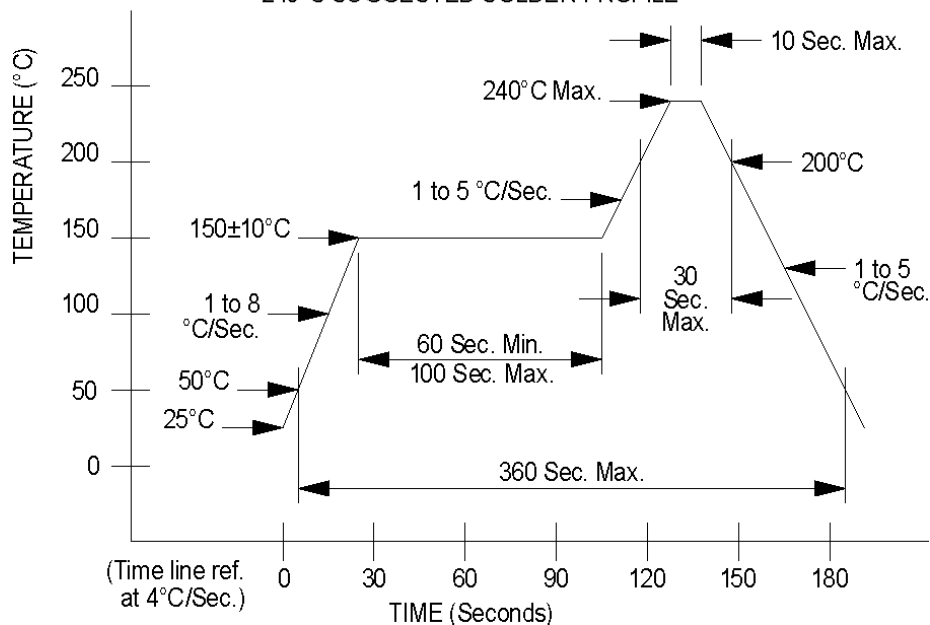
\* Series resonant designated by "SR" prefix (i.e., SRHC-49U/N). Other tolerances, stabilities and temperature ranges are available. Contact the factory for specific requirements.

# MtronPTI Lead Free Solder Profile



240°C  
 All the remaining surface mount,  
 both crystal and oscillator.

## 240°C SUGGESTED SOLDER PROFILE



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